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Valvular Heart Disease

MITRAL VALVE REPAIR IN PATIENTS WITH ISCHEMIC MITRAL REGURGITATION -- IS IT WORTHWHILE?

ACC Moderated Poster Contributions
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Session Title: Mitral Regurgitation: Novel Surgical and Percutaneous Observations
Abstract Category: 11. Valvular Heart Disease: Therapy
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Background: There is continued controversy over the effectiveness and durability of mitral valve repair (MVRp) in pts with ischemic MR (IMR). We evaluated the early and late clinical and echo results of MVRp pts.

Methods: From 1984 to 2011, 1277 pts had mitral valve repair on one service. 173 had ischemic pathology (I); the other 1104 had other pathologies (OP).

Results: Pts in I were older than OP: 65.94±9.43 vs. 61.31±14.28, had more prior MI: 58% (100/173) vs 6.6% (73/1104), more prior CAB: 29% (51/173) vs 3.4% (38/1104) and lower EF: 42.16±14.58 vs. 60.00±10.87, p<0.0001 for all. Mod-severe to severe MR: 68% (110/163) for I, 81% (796/1010) for OP, p=0.0042. They had more concomitant CABS: 72% (125/173) vs 14% (157/1104), p<0.0001, fewer concomitant AVRs, 2.3% (4/173) vs 7.6% (84/1104), p=0.0166, and smaller annuloplasty rings 26.03±1.57 vs. 29.39±3.25, p<0.0001. The I periop mortality was higher: 8.7% (15/173) vs 3.0% (33/1104) p=0.0005; and they had a longer hospital stay: 16.00±14.09 vs 11.37±9.66, p<0.0001. Predischarge EF was: I, 40.98±14.63 vs 51.44±12.41, OP (p<0.0001). Predischarge MR, mod-severe to severe, was 0.84% (1/119) in I grp and 1.8% (13/700) in the OP, p=0.0274. The 5 and 10-yr survival by Kaplan-Meier (KM) was 56% and 31% for I grp and 80% and 54% for OP grp, p<0.0001. Freedom from reoperation by KM analyses at 10 yrs was 92.1% for I grp and 93.1% for OP grp, p=0.135. Follow-up EF in I grp was 39.68±13.73 vs 55.0±12.29 (p<0.0001) in OP grp; but freedom from significant recurrent MR at 5 and 10 yrs (KM) was similar: for OP, 90.5% and 84.4%; for I, 88.4% and 83.5%, p=0.432. Predictors of mortality by Cox analysis were age, female gender, lower preop EF, prior chest surgery, double-layer annuloplasty technique, and non-isolated repair. Ischemia was a significant predictor of reoperation.

Conclusions: In our experience, surgery for IMR produced durable control of MR and favorable LV remodeling, even though long-term survival was depressed relative to the OP grp -- reflective of the unfavorable impact of severe CAD. We feel these data suggest that in most patients with moderate or greater MR, MVRp was worthwhile.